



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,945	11/07/2003	Philip Wiethe	81044519/202-1453	2944
28395	7590	08/05/2005	EXAMINER	
BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			PANG, ROGER L	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/605,945		WIETHE ET AL.	
	Examiner		Art Unit	
	Roger L. Pang		3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,10,12-14 and 16 is/are rejected.
- 7) ☒ Claim(s) 3-5, 7-9, 11, 15, 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to the amendment filed for application 10/605,945
June 20, 2005.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo. With regard to claim 1, Kondo teaches a method of controlling an automatic transmission 1001 in a vehicle, the vehicle including an engine 1006, a brake pedal 1018, and an accelerator pedal 1029, the method selectively providing engine braking, the transmission having shiftmaps comprising of upshift points (Fig. 1) and downshift points (Fig. 2), each being based on vehicle speed and accelerator pedal position, the method comprising: determining when automatic engine braking is desired (sporty); increasing some upshift points (Fig. 10); automatically downshifting to a lower gear (S2006: Fig. 11, when the speed and throttle are now past the downshift line), thereby providing engine braking for the vehicle, when at least one vehicle condition matches a corresponding predetermined vehicle condition (i.e. $SP(i) > .33$)), and wherein the transmission can be automatically down-shifted when the brake pedal is engaged, and when the brake pedal is disengaged (non-prohibiting condition). With regard to claim 2, Kondo teaches the method, wherein the at least one vehicle condition matches a corresponding predetermined vehicle condition when the vehicle speed drops below a first downshift point ($SP(i)$ and Fig. 11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo as applied to claim 1 above, and further in view of Ohta. Kondo teaches the method, but lacks the teaching of a manually operated switch to enable automatic engine braking. Ohta teaches a vehicle, wherein a sporty (power) condition may be set either automatically or via a manual switch 61 (Col. 8). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kondo to employ a manual mode switch in further view of Ohta in order to immediately run under a driver preferred shift map.

Claims 10, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo in view of Baumgartner. With regard to claim 10, see rejection of claim 1. Also, Kondo teaches a first brake pedal sensor 1017. Kondo lacks the teaching of a second brake pedal sensor. Baumgartner teaches a brake pedal 20 with a first 62 and second 64 sensor. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kondo to employ a second brake sensor in view of Baumgartner in order to contribute to the reliability of the entire brake by wire system (paragraph 11). With regard to claim 14, Baumgartner teaches the method, wherein the first brake sensor 62 senses a pedal position, and the second sensor 64 senses a brake pedal pressure (force). With regard to claim 16, see rejection of claim 10 and 1. Also, Kondo teaches an accelerator pedal sensor 1014, first and second shift modes (non-sporty

Art Unit: 3681

and sporty), wherein the first mode does not use automatic engine braking, while the second does (Col. 6).

Allowable Subject Matter

Claims 3-5, 7-9, 11-13, 15, and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

With regard to the Kondo reference, applicant argues that:

1) Kondo does not specify whether the downshifting can occur when the vehicle brake is engaged and unengaged.

The vehicle can downshift when the accelerator is pressed down, but the vehicle speed is low. An automatic downshift will occur because the throttle and vehicle speed point will cross the downshift line. The vehicle will also perform the automatic downshift when the brake is depressed, thereby lowering the speed of the vehicle to a point where the throttle and vehicle speed point will cross the downshift line. In the automatic transmission, as long as the throttle and vehicle speed point cross the downshift line, there will be an automatic downshift.

2) Kondo does not describe automatically downshifting the transmission to a lower gear when an automatic engine braking is desired.

The vehicle control system will determine that a sporty mode is applicable, and thereby change the shift maps (as claimed). Applicant has not claimed (in the rejected

claims) exactly what constitutes a desired engine braking condition. Engine braking is always increased when a down shift occurs. Whether or not the engine braking is actually used depends on throttle manipulation. Therefore, if a sporty mode is determined, shift points are changed, and (for example) the accelerator is pressed while at a speed below the downshift line, the driver is operating the vehicle to sense a “desired engine braking condition” and thereby causes a downshift.

A sporty mode only dictates that the vehicle should run within its power range for a longer period of time, thereby causing automatic downshifts at times. Whenever a downshift is performed, potential engine braking is increased (due to the reduction of the gearing) and therefor a “desired engine braking” condition could be interpreted.

With regard to the Ohta and Baumgartner references:

- 1) The only teaching that is derived from Ohta is a manually operated switch to a sporty mode. The sporty mode is already taught by Kondo.
- 2) The only teaching that is derived Baumgarnter is a second brake pedal sensor. Kondo already teaches of a first brake pedal sensor.

Applicant's arguments have been considered, but are not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. The central facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses

Art Unit: 3681

requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Art Unit: 3681

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L. Pang whose telephone number is 571-272-7096. The examiner can normally be reached on 5:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L Pang
Primary Examiner
Art Unit 3681

August 2, 2005